

This Week in SP351:2001: Homework, etc.

Homework must be submitted stapled in assignment groupings.

Always attempt to complete the readings before class. You are responsible for reading 10 pages past the current lecture. You may not understand the material completely, but you must read it prior to lecture.

**** Problems to submit on the date listed: ****

Week of 06 Sep

Monday

Read carefully FS 1-23, 28-32, 38-42

Read the problem statements for 1-10 and 15-18

Read FS 23-28, 32-38

Wednesday

Read carefully CN1-8, 12-14, Read CN8-12, Boas 43-54, 58-72

Friday:

FS 7, 16, FS 17

Week of 13 Sep

Monday:

CN 2, 4, 5, 7 Read the Matrices handout

Wednesday

Auxiliary Problems: A1, A2 ; Boas Problem page 124: 2, 4

For # 2 compute $AB, BA, A+B, 5A, 3B, 5A-3B$ and $AB-BA$ only

B: => Boas Problem CN: =>Complex Numbers Handout Problem

A: => Auxiliary Problem - statement on this page !

Hints

A1.) Compute $\frac{3+4i}{4+3i}$ and $\frac{3+4i}{4-3i}$. Verify that $24^2 + 7^2 = 25^2$.

A2.) Compute $(16i)^{1/4}$. Use the half angle relations $\cos(\theta/2) = \pm\sqrt{(1+\cos\theta)/2}$ and $\sin(\theta/2) = \pm\sqrt{(1-\cos\theta)/2}$ to show that one root is $\sqrt{2}\left[\sqrt{1+1/\sqrt{2}} + i\sqrt{1-1/\sqrt{2}}\right]$.